

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012161**Date Inspected:** 23-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

OBG # CROSS BEAM CB04

This QA observed ZPMC qualified welding personnel identified as 066179 perform Shielded Metal Arc Weld (SMAW) Process repair welding on weld joint CB202A-004-002. ZPMC Quality Control Personnel (QC) identified as Mr. Zheng Zhi Wei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-4G (4F)-Repair and approved Critical Weld Repair (CWR) B-CWR 1091.

OBG # CROSS BEAM CB05

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB06

This QA observed ZPMC qualified welding personnel identified as 067572 perform Shielded Metal Arc Weld

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(SMAW) Process on weld joint DP535-006-009,010. ZPMC Certified Welding Inspector (CWI) identified as Mr. Li Yang was present to monitor the welding process. The welding parameters as measured using QCs calibrated instruments appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA observed ZPMC qualified welding personnel identified as 066038 perform Shielded Metal Arc Weld (SMAW) Process on weld joint DP203-006-015,008. ZPMC Certified Welding Inspector (CWI) identified as Mr. Li Yang was present to monitor the welding process. The welding parameters as measured using QCs calibrated instruments appeared to be in general compliance with WPS-B-P-2114-FCM-1.

OBG # SEGMENT 6CW

This QA observed ZPMC appears to have deviated from the design specified on the approved drawings without the Engineers approval. ZPMC has cut the flange from the web of WT stiffener identified as X27C. The stiffener is located on the FL3 floor beam at Panel Point 046. The cut measured approximately 160mm in length, perpendicular to Complete Joint Penetration (CJP) weld identified as SSD025-045-171. This area will require a weld that is not designated on the approved drawings. The member is identified as a partial height cross beam diaphragm. This QA notified ABF QC identified as Mr. Peter Shaw and ZPMC QA identified as Mr. Wang Lu of this issue and that an incident report would be generated.

OBG # CROSS BEAM CB07

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB08

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB09

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB10

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB 11

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

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OBG # CROSS BEAM CB12

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB13

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB14

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB15

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB16

This QA observed ZPMC personnel heat straightening bottom panels identified as BP201A and BP203A on this crossbeam. ZPMC QC identified as Mr. Shen Jian Guo was present to monitor the heat straightening process. Mr. Shen Jian Guo informed this QA that the heat straightening was being performed to correct the weld distortion. The heat straightening process appeared to be in the general compliance with contractor document HSR1 (B)-7995. No other significant work was being performed on this crossbeam during the time QA was present. See attached picture.

OBG # CROSS BEAM CB17

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

As mention above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

Inspected By:	Sukanthan,Dhanasingh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
